

# **1999 Toxics Release Inventory**

## **MISSOURI**

#### Reported Releases and Waste Management Activities (in pounds)

	Original Industries	New Industries	Total
On-site Releases	52,114,992	72,959,934	125,074,926
Air Emissions	29,195,939	12,752,549	41,948,488
Surface Water Discharges	3,343,958	154,369	3,498,327
Underground Injection Class I Wells	0	0	0
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	69,865	0	69,865
Other On-site Land Releases	19,505,230	60,053,016	79,558,246
Off-site Releases (Transfers Off-site to Disposal)*	4,665,440	411	4,665,851
Total On- and Off-site Releases	56,780,432	72,960,345	129,740,777
Recycled On-site	224,972,881	530,260	225,503,141
Recycled Off-site	56,383,686	1,296,378	57,680,064
Energy Recovery On-site	130,098,666	0	130,098,666
Energy Recovery Off-site	10,354,592	353,406	10,707,998
Treated On-site	51,089,782	5,694,291	56,784,073
Treated Off-site**	13,228,227	111,261	13,339,488
Quantity Released On- and Off-site***	59,038,761	72,564,072	131,602,833
Total Production-related Waste Managed	545,166,595	80,549,668	625,716,263
Total Non-production-related Waste Managed	59,122	2,609	61,731

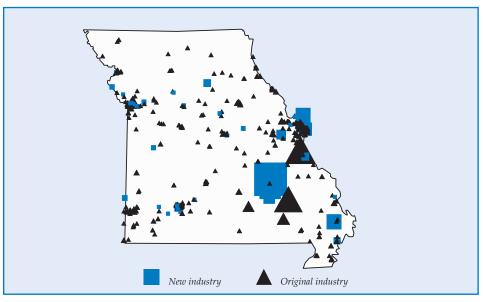
### Transfers Off-site for Further Waste Management/Disposal

Recycling	55,713,534	551,259	56,264,793
Energy Recovery	10,128,050	366,301	10,494,351
Treatment	8,704,866	97,482	8,802,348
Publicly Owned Treatment Works (POTWs)	7,232,064	551	7,232,615
Metals and Metal Compounds*	139,194	5	139,199
Non-metal TRI Chemicals**	7,092,870	546	7,093,416
Other Off-site Transfers****	0	0	0
Off-site Transfers to Disposal (not including metals to POTWs)	4,598,664	406	4,599,070
Total Transfers Off-site for Further Waste Management/Disposal	86,377,178	1,015,999	87,393,177

- \* Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- \*\*\* Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- \*\*\*\*Transfers reported without a valid waste management code.

#### For More Information . . .

State Contact:EPA Regional Contact:To obtain TRI data useGene NickelStephen Wurtzassistance, call TRI User(573) 526-6627(913) 551-7315Support Service (TRI-US):Fax: (573) 526-5808Fax: (913) 551-7065(202) 260-1531E-mail: nrnicke@mail.dnr.state.mo.usE-mail: wurtz.stephen@epa.govFax: (202) 401-2347



The largest marker in the state map represents the largest facility for on-site releases in the state of Missouri. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

#### State/TRI Data

Population			5,468,338
Square Miles			68,898
Total Facilities			583
Total Forms			2,102
Form As			390
	Original Industries	New Industries	Total

National Rank for Total On- and Off-site Releases*  Rank 17 12	
	17
Pounds 56,780,432 72,960,345 129,740	),777
National Rank for Total On-site Releases**	
Rank 14 11	17
Pounds 52,114,992 72,959,934 125,074	1,926
National Rank for Total Releases within State***	
Rank 14 11	17
Pounds 61,976,770 74,251,134 136,223	7,904
National Rank for Production-related Waste Managed	
Rank 14 20	17
Pounds 545,166,595 80,549,668 625,710	5,263

- Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Includes amounts released at the facility. Excludes amounts transferred to other sites.
- \*\*\* Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

#### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

			On-site R	eleases		Off-site Releases		Off-si	te Transfers to Dispo	sal
CAS		Air	Surface Water	Underground	On-site Releases to	Transfers Off-Site to	Total Releases in	Transferred Into	Transferred Within	Transferred Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
	Zinc compounds	103,357	660	0	14,375,440	466,985	14,946,442	276,306	289,466	177,519
67-56-1	Methanol	8,255,498	9,395	0	5	156,007	8,420,905	0	155,554	484
	Lead compounds	352,668	571	0	3,842,609	1,262,185	5,458,033	5,482,286	1,241,435	20,750
1330-20-7	Xylene (mixed isomers)	3,565,795	5	0	0	47,422	3,613,222	0	15,825	31,597
	Nitrate compounds	270	2,780,294	0	1,588	53,290	2,835,442	0	3,200	50,090
	Glycol ethers	1,831,930	5	0	4,400	62,053	1,898,388	5	41,090	20,963
108-88-3	Toluene	1,821,814	22	0	5	1,607	1,823,448	0	801	806
7664-41-7	Ammonia	1,029,546	545,636	0	65,161	94,401	1,734,744	0	18,300	76,101
110-54-3	n-Hexane	1,283,312	0	0	0	5	1,283,317	0	5	0
100-42-5	Styrene	1,185,329	0	0	0	24,148	1,209,477	0	24,148	0

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

One facility in Kentucky incorrectly reported 5,411,508 pounds of lead compounds as a transfer off-site to disposal to Missouri. This amount should have been reported as being sent off-site to recycling and, therefore, not included in the amount Transfered into State.

#### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

			On-site Re	leases		Off-site Releases		Off-site	Transfers to Disposa	1
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
CAS		Air	Water	Underground	Releases to	Off-Site to	Releases in	Into	Within	Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
	Lead compounds	152,610	7,174	0	24,500,295	0	24,660,079	586	0	0
	Zinc compounds	207,078	24,524	0	20,940,797	115	21,172,514	2,009	15	100
7647-01-0	Hydrochloric acid	8,772,734	0	0	0	0	8,772,734	0	0	0
	Barium compounds	145,027	105,107	0	7,605,054	5	7,855,193	156	5	0
	Copper compounds	11,073	2,668	0	5,919,417	10	5,933,168	310	10	0
7664-39-3	Hydrogen fluoride	1,878,183	0	0	0	0	1,878,183	80	0	0
7664-93-9	Sulfuric acid	1,427,471	0	0	0	0	1,427,471	0	0	0
7440-39-3	Barium	11,152	0	0	298,650	0	309,802	543,309	0	0
	Manganese compounds	7,958	6,110	0	241,113	10	255,191	76	10	0
	Cobalt compounds	556	0	0	181,854	0	182,410	0	0	0

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

<sup>\*\*</sup> The chemical ranking is based on the amounts in this column.

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# **MISSOURI**

### On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Original Industries)

				Off-site R (Transfers Off-sit					
			Undergrou	nd Injection	On-site Rel	leases to Land			
		Surface			RCRA	Other	Total		
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Transferred	Transferred
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	Within State	Out of State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Doe Run Co. Herculaneum Smelter, Herculaneum, Jefferson	331,549	179	0	0	0	9,671,956	10,003,684	997	563
Doe Run Co. Glover Smelter, Glover, Iron	48,306	17	0	0	0	9,171,198	9,219,521	0	572
Royal Oak Ent. Inc Ellsinore Mo., Ellsinore, Carter	3,217,392	0	0	0	0	0	3,217,392	0	0
Craig Ind. (Leased To Royal Oak Ents.), Summersville, Shannon	2,770,848	0	0	0	0	0	2,770,848	0	0
Ford Motor Co. Kansas City Assembly Plant, Claycomo, Clay	1,953,894	0	0	0	0	0	1,953,894	34,170	26,465
Ford Motor Co. St. Louis Assembly, Hazelwood, St Louis	1,548,108	0	0	0	0	0	1,548,108	2,223	22,621
Dow Chemical Co. Riverside Site, Pevely, Jefferson	1,545,102	0	0	0	0	0	1,545,102	0	0
ICI Explosives USA Inc., Joplin, Jasper	384,860	847,200	0	0	0	0	1,232,060	0	0
GMC Wentzville Assembly, Wentzville, St Charles	1,125,353	0	0	0	0	0	1,125,353	1,320	31,900
Royal Oak Enterprises Inc., Licking, Texas	805,392	0	0	0	0	0	805,392	0	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

### On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)

	On-site Releases							Off-site R (Transfers Off-sit	
			Undergrou	nd Injection	On-site Rel	leases to Land			
Facility, City, County	Air Emissions Pounds	Surface Water Discharges Pounds	Class I Wells Pounds	Class II-V Wells Pounds	RCRA Subtitle C Landfills Pounds	Other On-site Land Releases Pounds	Total On-site Releases* Pounds	Transferred Within State Pounds	Transferred Out of State Pounds
Viburnum Mines/Mill, Viburnum, Iron	74,331	9,978	0	0	0	14,031,444	14,115,753	0	0
Brushy Creek Mine/Mill, Bunker, Reynolds	30,822	4,264	0	0	0	8,487,306	8,522,392	0	0
Fletcher Mine/Mill, Bunker, Reynolds	24,750	1,750	0	0	0	7,238,140	7,264,640	0	0
Buick Mine/Mill, Boss, Iron	37,209	6,162	0	0	0	6,686,327	6,729,698	0	0
Westfork Mine/Mill, Bunker, Reynolds	3,376	1,250	0	0	0	5,353,086	5,357,712	0	0
Sikeston Power Station, Sikeston, Scott	110,137	0	0	0	0	5,218,401	5,328,538	0	0
Ameron Corp. Sioux Power Station, West Alton, St Charles	4,453,535	9,330	0	0	0	863,000	5,325,865	0	0
Ameren Corp.Meramec Power Station, Saint Louis, Saint Louis City	3,808,313	11,490	0	0	0	595,000	4,414,803	0	0
Sweetwater Mine/Mill, Ellington, Reynolds	15,151	1,000	0	0	0	3,691,453	3,707,604	0	0
Ameren Corp.Labadie Power Station, Labadie, Franklin	530,250	39,520	0	0	0	2,166,000	2,735,770	0	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

## **MISSOURI**

## Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- production- related Waste Managed Pounds
Doe Run Co. Herculaneum Smelter, Herculaneum, Jefferson	23,005,648	0	0	0	0	0	10,015,781	33,021,429	10,562
Doe Run Co. Glover Smelter, Glover, Iron	62,518,062	5,085,790	0	0	4,493	572	9,219,880	76,828,797	0
Royal Oak Ent. Inc Ellsinore Mo., Ellsinore, Carter	0	0	0	0	0	0	3,217,392	3,217,392	0
Craig Ind. (Leased To Royal Oak Ents.), Summersville, Shannon	0	0	0	0	0	0	2,770,848	2,770,848	0
Ford Motor Co. Kansas City Assembly Plant, Claycomo, Clay	0	892,760	0	255,340	608,900	63,790	2,014,641	3,835,431	0
Ford Motor Co. St. Louis Assembly, Hazelwood, St Louis	0	689,100	0	0	110,280	41,150	1,561,163	2,401,693	0
Dow Chemical Co. Riverside Site, Pevely, Jefferson	0	0	0	6,800	0	0	1,545,102	1,551,902	0
Doe Run Co. Recycling Facility, Boss, Iron	4,899	0	0	0	0	0	1,428,520	1,433,419	0
GMC Wentzville Assembly, Wentzville, St Charles	0	521,800	0	46,550	596	19,007	1,346,560	1,934,513	3
Memc Electronic Materials Inc. St. Peters Plant, O Fallon, St Charles	0	0	0	0	1,830,000	18,000	1,242,611	3,090,611	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)

Facility, City, County	<b>Recycled</b> <b>On-site</b> Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- production- related Waste Managed Pounds
Viburnum Mines/Mill, Viburnum, Iron	0	0	0	0	0	0	14,115,373	14,115,373	0
Brushy Creek Mine/Mill, Bunker, Reynolds	0	0	0	0	0	0	8,522,226	8,522,226	0
Fletcher Mine/Mill, Bunker, Reynolds	0	0	0	0	0	0	7,263,825	7,263,825	0
Buick Mine/Mill, Boss, Iron	0	0	0	0	0	0	6,523,598	6,523,598	0
Westfork Mine/Mill, Bunker, Reynolds	0	0	0	0	0	0	5,357,209	5,357,209	0
Sikeston Power Station, Sikeston, Scott	0	0	0	0	0	0	5,328,537	5,328,537	0
Ameron Corp. Sioux Power Station, West Alton, St Charles	0	0	0	0	993,000	0	5,307,000	6,300,000	0
Ameren Corp.Meramec Power Station, Saint Louis, Saint Louis City	0	0	0	0	216,000	0	4,412,000	4,628,000	0
Sweetwater Mine/Mill, Ellington, Reynolds	0	0	0	0	0	0	3,707,313	3,707,313	0
Ameren Corp.Labadie Power Station, Labadie, Franklin	0	0	0	0	679,000	0	2,695,000	3,374,000	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.